

AWARDS

ARL Wins DOD Awards

The Army Research Laboratory (ARL) Intelligence and Security (I&S) Office and Mary Fisher, an ARL employee, are recent recipients of the DOD Award for Counterintelligence Best Practices. Fisher, who is ARL's Foreign Disclosure Officer, won the individual award while the I&S Office received the organizational award. Both awards were presented in recognition of achievements related to ARL's Foreign Disclosure and Visitor Program.

Fisher was specifically cited for her efforts in overseeing the development of a tracking system and database that maintains records on all ARL visitors. Both Fisher and the I&S Office were recognized for establishing more efficient procedures and policies for use in the Foreign Disclosure and Visitor Program.

Fisher credits cooperation within the I&S Office, co-worker support, and cooperation of ARL scientists and engineers for making the program a success.

BOOKS

Serious Play: How the World's Best Companies Simulate to Innovate

By Michael Schrage
Harvard Business School Press, Boston, 2000

Reviewed by LTC John Lesko (U.S. Army Reserve), a Decision Coach and Group Facilitator for Anteon Corp. Lesko is a member of the Army Acquisition Corps and a frequent contributor to Army AL&T. He can be contacted at John.Lesko@saftas.com.

"*Serious Play* is about serious work: how the world's leading companies model, prototype, and simulate to innovate. Increasingly, prototypes are the key platforms and models are the core media for managing risk and creating value. They allow for cost-effective creativity, encourage profitable improvisation, and inspire organizations to collaborate in unexpected ways. *Serious Play* is a crisply written handbook for product, process, and project leaders who are determined to manage their innovation initiatives successfully."

Thus begins the first paragraph from this book's jacket cover. Although this reviewer may argue with just how "crisply" this book is written, I wholeheartedly agree with the author's premise that by studying prototyping successes we may better prepare our own organizations for needed change and innovation. Relative to the book's readability, peruse this book. Study it. Work through its abstractions and complexity. This is a dense yet insightful work that may significantly alter the way you view models and simulations in the future.

Serious Play picks up where Schrage's earlier work, *No More Teams!*, leaves off. In *No More Teams!*, Schrage examines several of the key elements of creative collaboration. Notably, he introduces the concept of *shared space* and describes the importance of prototypes in managing cross-functional creativity between partners such as Mitch Kapor and John Sachs (co-creators of Lotus 1-2-3 software) and Drs. James Watson and Francis Crick (co-discoverers of DNA's double-helix molecular structure).

In *Serious Play*, Schrage expands and refines these themes and draws upon a much wider range of success stories. Now we learn of the best business and innovative practices of companies such as Walt Disney, Boeing, Merrill Lynch, General Electric, Sony, IBM, IDEO, Microsoft, Royal Dutch Shell, DaimlerChrysler, and American Airlines.

Schrage, who is a Research Associate at the MIT Media Lab and a Columnist for *Fortune* magazine, concludes this book with a very practical *User's Guide*, which contains 10 lessons for prototyping success:

- Ask, "Who benefits?"
- Decide what the main paybacks should be and measure them. Rigorously.
- Fail early and often.
- Manage a diversified prototype portfolio.
- Commit to a migration path. Honor that commitment.
- Prototypes should encourage play.
- Create markets around the prototype.
- Encourage role-playing.
- Determine the points of diminishing return.
- Record and review relentlessly and rigorously.

Product and process development engineers will no doubt find a way to apply at least one, and perhaps several, of these lessons to their own projects or programs.

However, *Serious Play* should also appeal to a much broader audience, thus benefiting today's warfighters, analysts, logisticians, and Defense executives as they prepare for and participate in acquisition war games beside their engineering brethren. This book is written for more than just materiel developers, operations research types, and research and development officers. Schrage's work challenges all readers to think about their mental models and how to adapt these models to enrich their planning and decisionmaking.

It is time to remember the old saying, "All work and no play makes Jack a dull boy." The acquisition workforce cannot afford to develop dullards. This book belongs on the *must read* list for all acquisition professionals. Let's engage in serious play.

The Knowing-Doing Gap: How Smart Companies Turn Knowledge into Action

By Jeffrey Pfeffer and Robert I. Sutton
Harvard Business School Press, 2000

Reviewed by LTC Kenneth H. Rose (USA, Ret.), a Project Management Instructor for ESI International residing in Hampton, VA, and a former member of the Army Acquisition Corps.

Conventional wisdom has it that knowledge is the new vector of competitive advantage on the field of business endeavor. In their recent book, *The Knowing-Doing Gap: How Smart Companies Turn Knowledge into Action*, Jeffrey Pfeffer and Robert I. Sutton see things a bit differently. To them, advantage goes not to those who have the best knowledge, but to those who use knowledge best.

This is an important issue for project managers. If projects are, as David Cleland describes, “building blocks in the design and execution of organization strategies,” then project managers must be vitally interested in action; that is, knowledge at work, not just knowledge in place.

Knowledge is not necessarily the unique, hard-to-copy asset that has been portrayed in recent management literature. Every year, organizations spend \$60 billion on training and more than \$40 billion on consulting services that deliver essentially the same knowledge to all buyers. The problem, according to Pfeffer and Sutton, is not that organizations do not have enough knowledge, it's that organizations don't do anything, or at least not enough, with the knowledge they have.

Early on, the authors emphasize the importance of learning-by-doing as a means of avoiding the knowing-doing gap. People who *learn* as they do have little problem *doing* based on what they learned because the two—learning and doing—are a connected continuum, not discrete steps. Soldiers and surgeons are cited as examples of successful do-learn-do professionals. Pfeffer and Sutton discuss five hurdles often encountered in turning knowledge into action in other organizations.

One of the main hurdles is talk substituting for action. Talking about something is not the same as doing something about it; yet briefings, discussions, and plans all seem to take the place of action in many organizations. The authors cite examples of preventive measures, chief among them the selection of leaders who have personal experience and intimate knowledge of organization work processes.

Memory can substitute for thinking. Organizations can adopt an almost mindless reliance on things past, which impedes action in the present. Any new challenge is met by the same old response out of a misplaced reverence for precedent and consistency. Pfeffer and Sutton describe three approaches for breaking this mold: build a new sub-organization unfettered by the old ways; make it difficult—

sometimes by drastic means—to adhere to the old ways; and, rarely applied, build an organization in which people constantly question precedent.

Fear is a powerful emotion that can prevent people from acting on their knowledge. The authors show that fear remains a pervasive management technique. “Tough” managers get the good press, reinforcing their fear-based approach. They also drive the workforce into a cautious lethargy that limits both desire and ability to act. A key step in overcoming this situation is to treat mistakes as a source of learning and subsequently better action, not a foundation for punishment. Communication and understanding go a long way toward building an organization free of debilitating fear and distrust.

Measurements are almost objects of homage in many organizations. Badly designed or overly complex measurements are also one of the greatest barriers to putting knowledge into action. Measurement is a powerful communicator of what is important. People will stick like glue to what is measured, and do whatever is necessary to get the right numbers. If measurement is focused on the wrong things, the resulting action can be good for the measure but bad for the organization. The authors suggest focusing measurement on groups, recognizing that individual control is usually limited. They also suggest measuring processes, where action can make a difference, rather than outcomes where action is always after the fact. Overall, measurement should reinforce organization goals, not merely reflect short-term appearances.

Competition may be great in the marketplace, but it can be a killer within an organization. How can an organization compete successfully on a larger scale when its members are locked in a deadly survival-of-the-fittest conflict with each other? Competition undermines collaboration and teamwork and limits effective action for the good of the organization. Instead, people act for the good of themselves, or worse, to the detriment of others. Pfeffer and Sutton offer a number of techniques for avoiding destructive competition, including rewarding collaborative work, avoiding zero-sum individual reward systems, modeling desired behavior at top levels of management, and building an organizational culture that defines individual success partly by the success of others.

Pfeffer and Sutton apply their premise that knowing is not enough and describe eight guidelines for action, which provide a framework for closing the knowing-doing gap. And on the last page, they remind readers that *knowing* about the gap is not sufficient. They encourage readers to take action within their own organization and thereby learn more about it, which should enable further action.

The Knowing-Doing Gap is an insightful treatment of a common, often unrecognized problem. It will generate some “light bulbs” in reader's minds and probably a little defensiveness. (“Thank goodness I am not like that!”) Regardless, it should generate action that improves an organization's ability to apply what it knows. It provides the *knowledge* for *doing* just that.